

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Permits Section

NOI Supplement for Type 3.06 General Aquifer Protection Permit for Constructed Wetlands to Treat Acid Rock Drainage at Mining Sites [A.A.C. R18-9-D306]

This General Permit allows the operation of constructed wetlands for the treatment of acid rock drainage from a closed mining facility. If the proposed discharge, design, or operation of the wetlands does not conform to this rule, the owner or operator must obtain an individual APP.

Note: Please ensure that the narrative, design drawings, and any supplemental information provided is comprehensive and adequate to demonstrate conformance with A.A.C. R18-9-D306.

- 1. Please attach a **narrative description and design plans** for the facility to be addressed under this General Permit.

 Describe wetland operations, the nature of the wetland, date and methods of construction, and identify all discharges to be directed to the wetland. Please place a check in the following boxes indicating that you have provided all of the following in the narrative.
 - Demonstration the wetland is designed for optimum size, cell configuration, vegetative species composition, and berm configuration
 - Consideration of rainfall events, including how proper operation during a 25-year, 24 hour storm event will be achieved and demonstration that physical integrity will be maintained during a100-year, 24-hour storm event
 - Details of the liner design, installation, and Quality Assurance/Quality Control procedures
 - Description of the quality of the influent, the treatment process to be used, and expected quality of the treated wastewater
 - Characterization of the water released to the wetland, describing how it will be compatible with construction materials and vegetation

- Characterization of any water to be released from the wetland, including that it will meet numeric Aquifer Water Quality Standards, will have a pH of between 6 and 9, and sulfate concentration less than 1000 mg/l
- Discussion of routine wetland inspection, maintenance and monitoring activities to be performed
- 2. Please provide the depth to groundwater in the area of the wetland, and indicate how this was determined.

3. Have you attached a **Best Management Practices Plan** that includes:

A site plan showing the wetland footprint, point of inflow, storm water drainage and placement of vegetation "yes

A contingency plan to address treatment performance, wash-out and vegetation die-off, including a plan to apply for an individual permit if the wetland is unable to continually achieve the appropriate treatment standards in R18-9-D306(C)(1) ves

Management of flows into and through the wetland to minimize erosion and damage to vegetation "yes

A description of measures to restrict public access to the wetlands, including proper signage as required by R18-9-D306(C)(6) " yes

A management plan for vector control "yes

A plan or criteria for enhancing or supplementing wetland vegetation "yes

4. Identify each wastewater stream to be directed to the wetland, and include its characterization, rate and volume of discharge (Including past discharges, if applicable. Use additional pages as necessary).